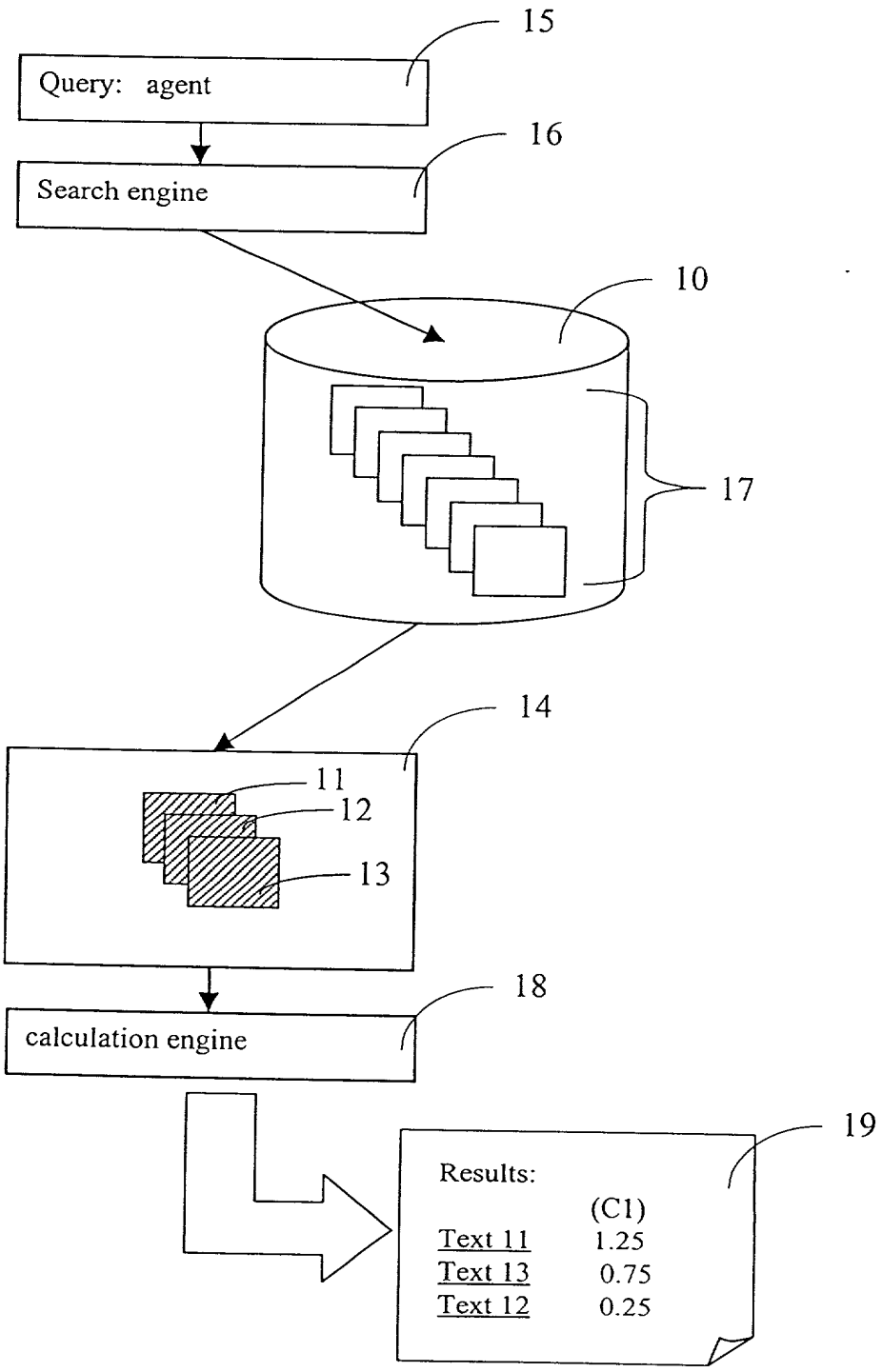

15
Query: agent
16
Search engine
10
17
14
11
12
13
18
calculation engine
19
Results:
(C1)
Text 11 1.25
Text 13 0.75
Text 12 0.25

FIG. 1

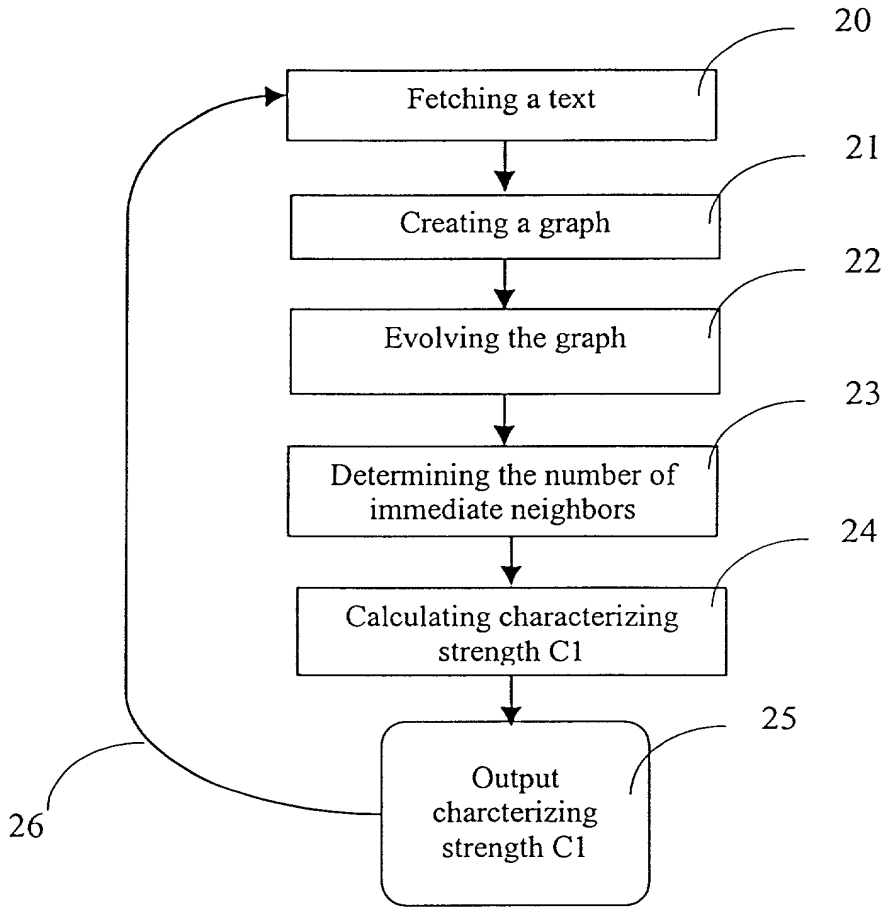

20
Fetching a text
21
Creating a graph
22
Evolving the graph
23
Determining the number of immediate neighbors
24
Calculating characterizing strength C1
25
Output charcterizing strength C1
26

FIG. 2

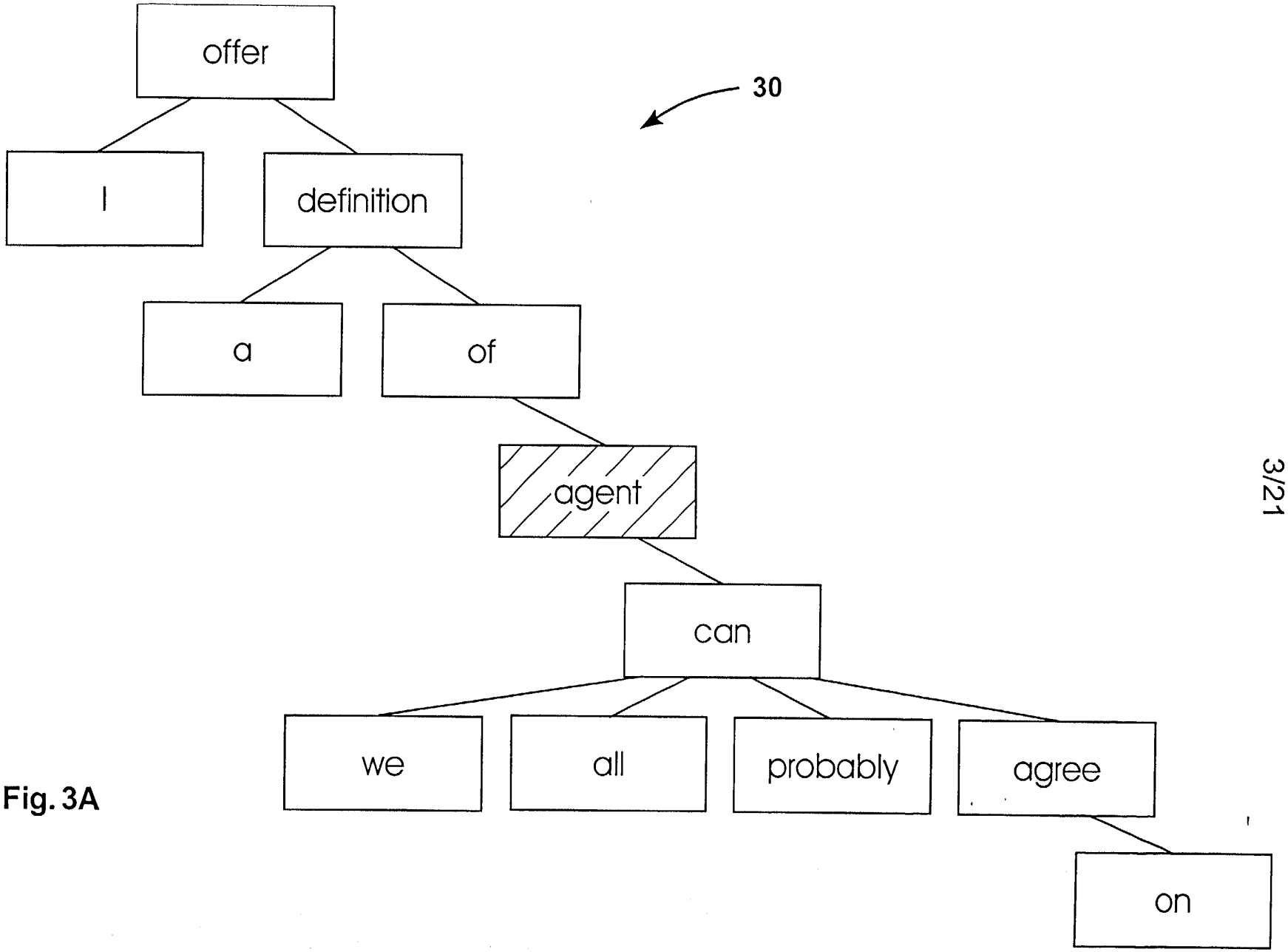


Fig. 3A

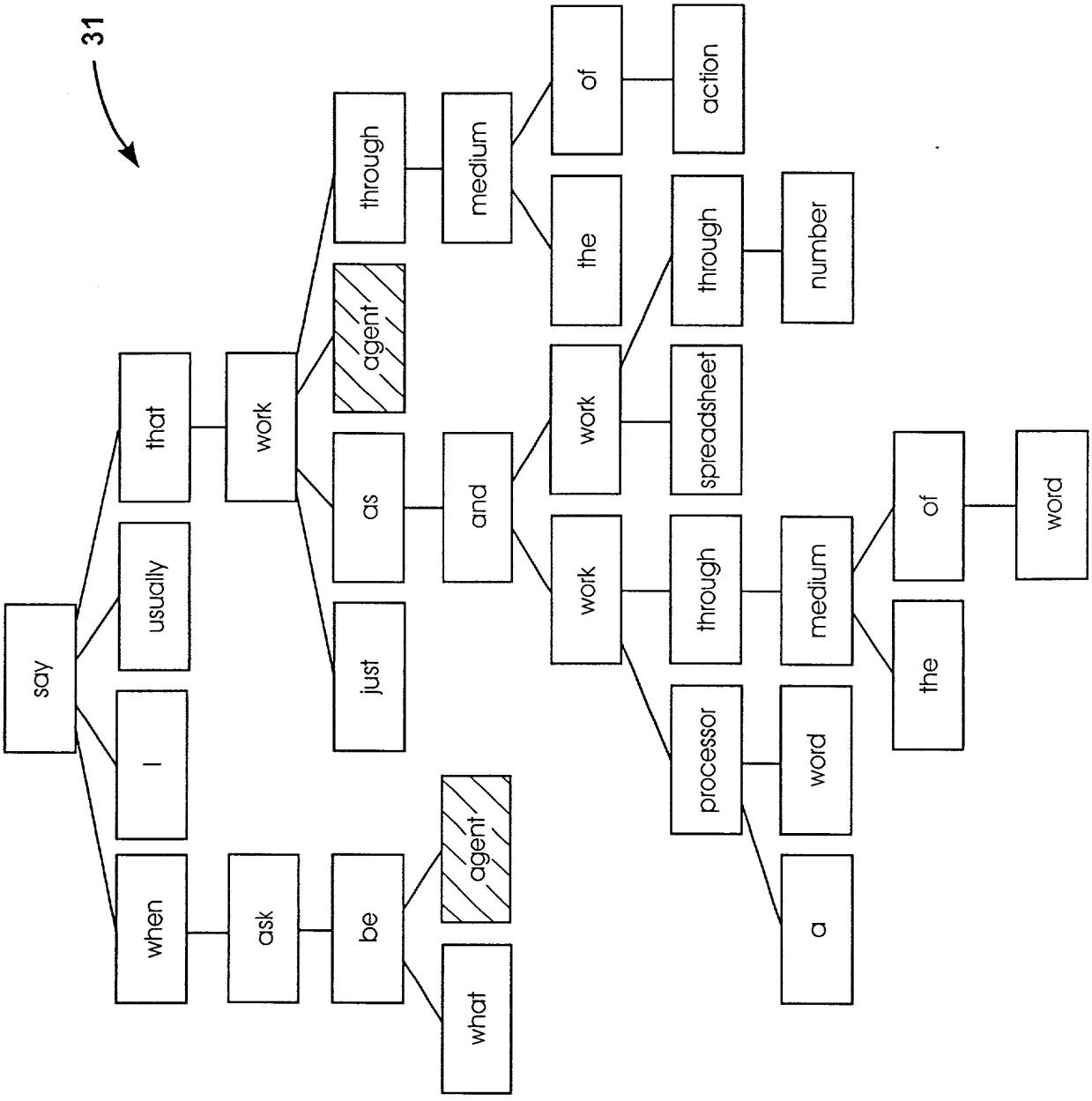

31
say
I
usually
when
that
ask
work
be
agent
what
through
agent
as
just
and
medium
of
the
action
work
work
work
through
through
spreadsheet
number
processor
through
medium
of
word
a
word
the

Fig. 3B

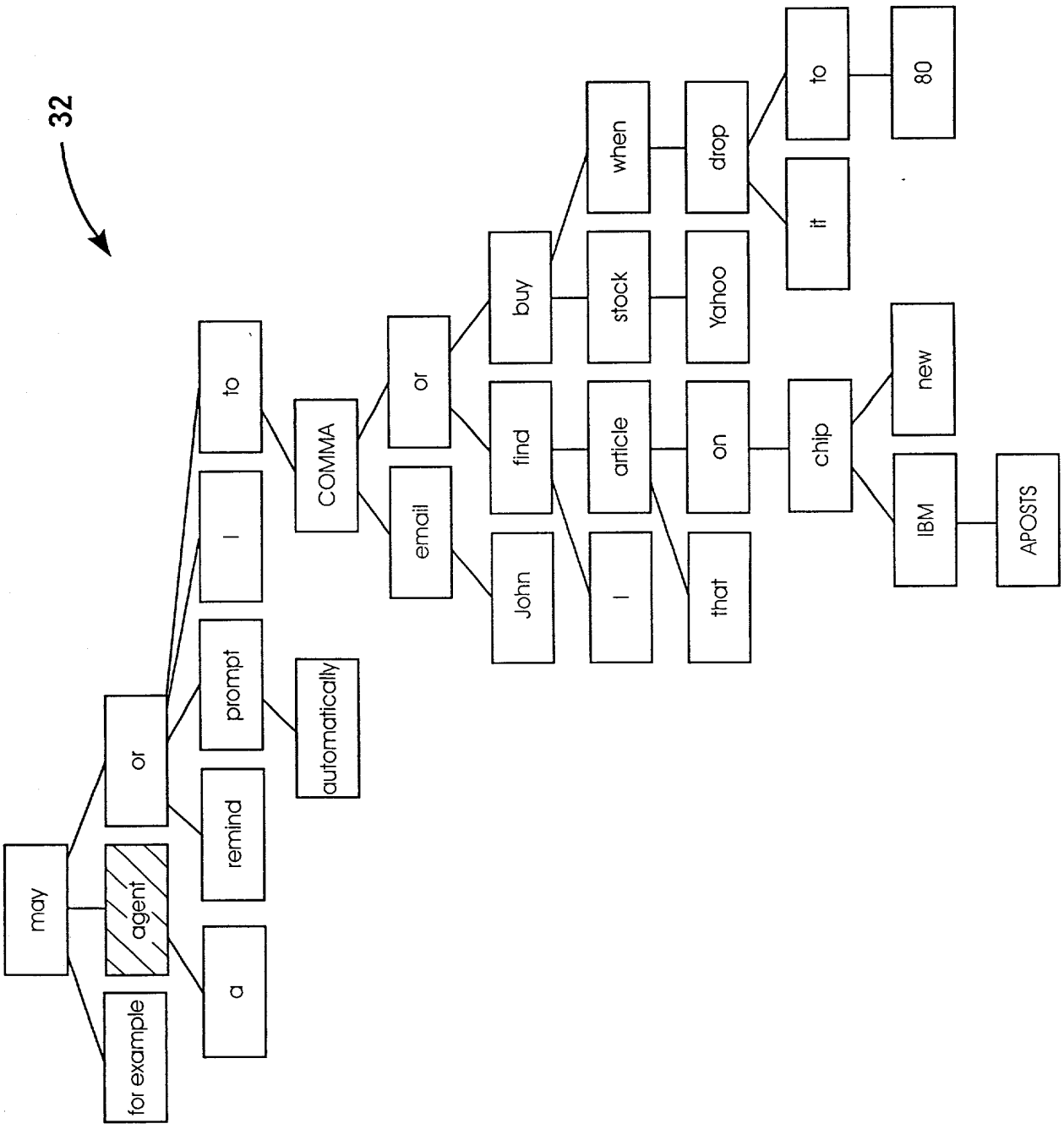

32
may
for example
agent
or
a
remind
prompt
automatically
I
to
COMMA
email
or
John
find
buy
I
article
stock
that
on
Yahoo
when
drop
it
to
80
chip
IBM
new
APOSTS

Fig. 3C

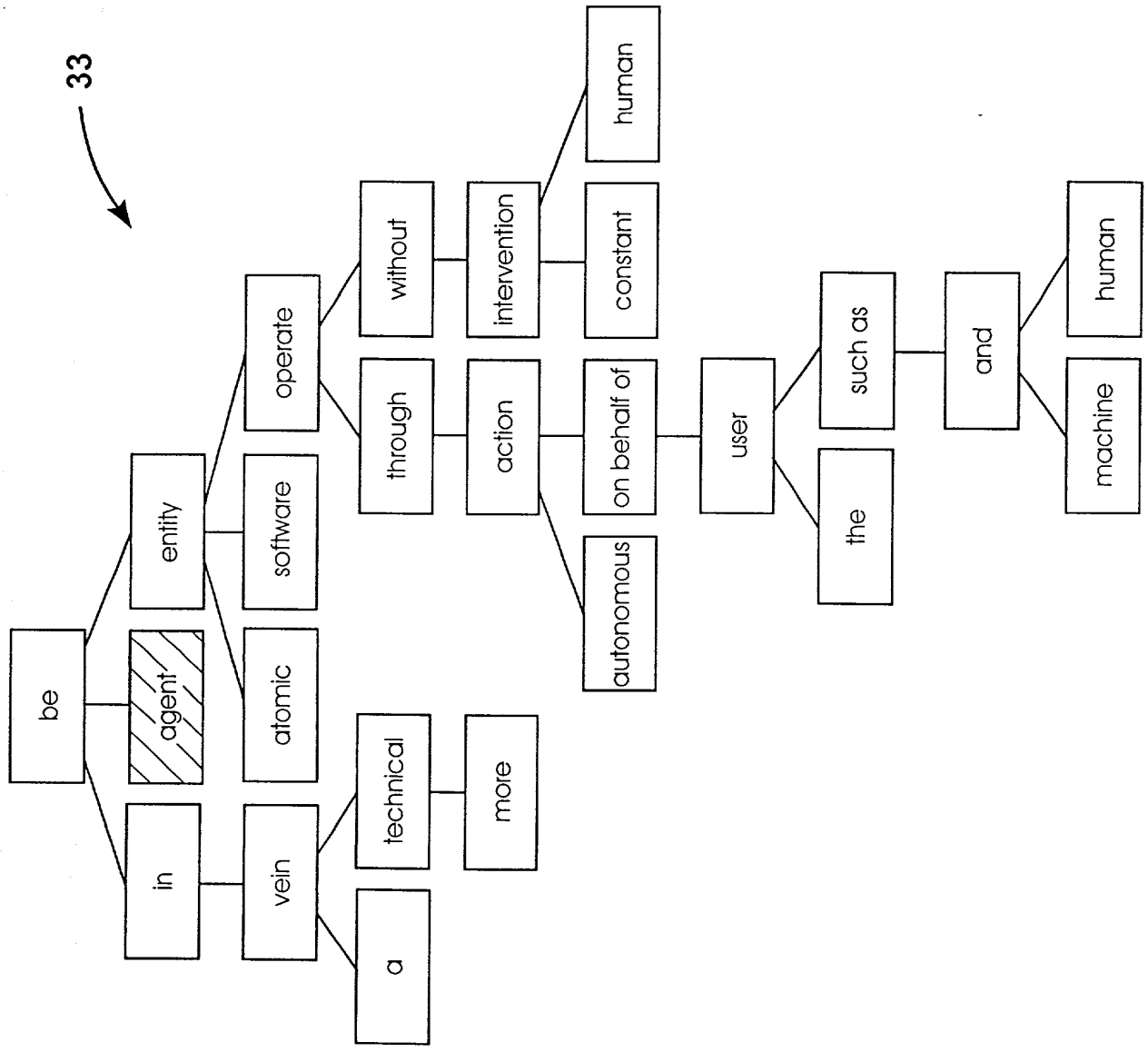

33
be
agent
in
entity
vein
atomic
software
a
technical
more
operate
through
without
action
intervention
on behalf of
constant
autonomous
human
user
the
such as
and
human
machine

Fig. 3D

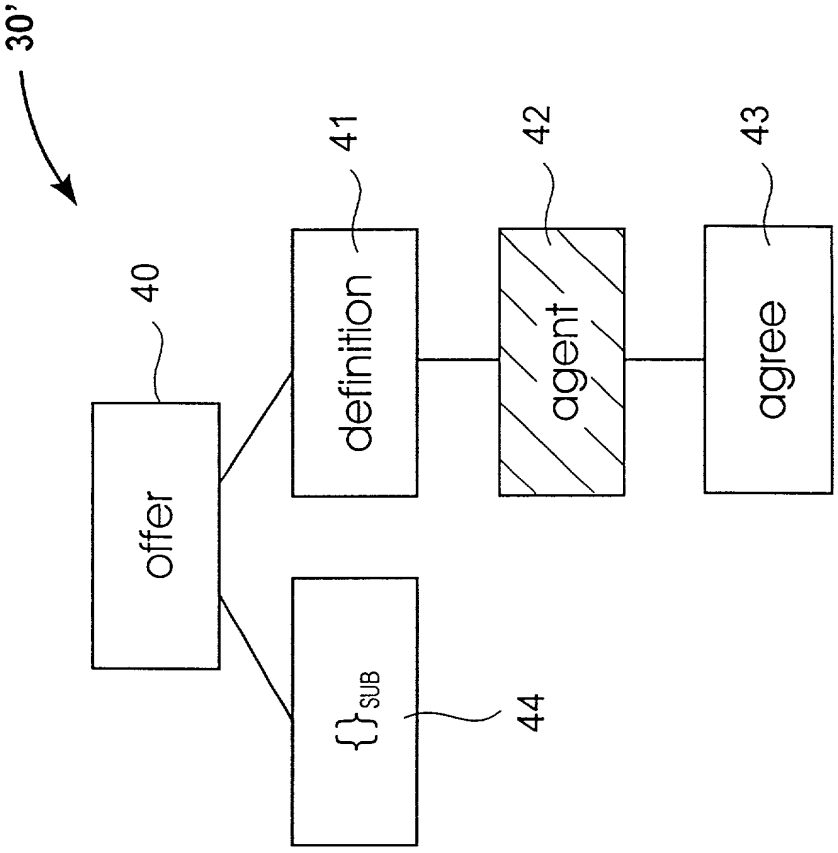


Fig. 4A

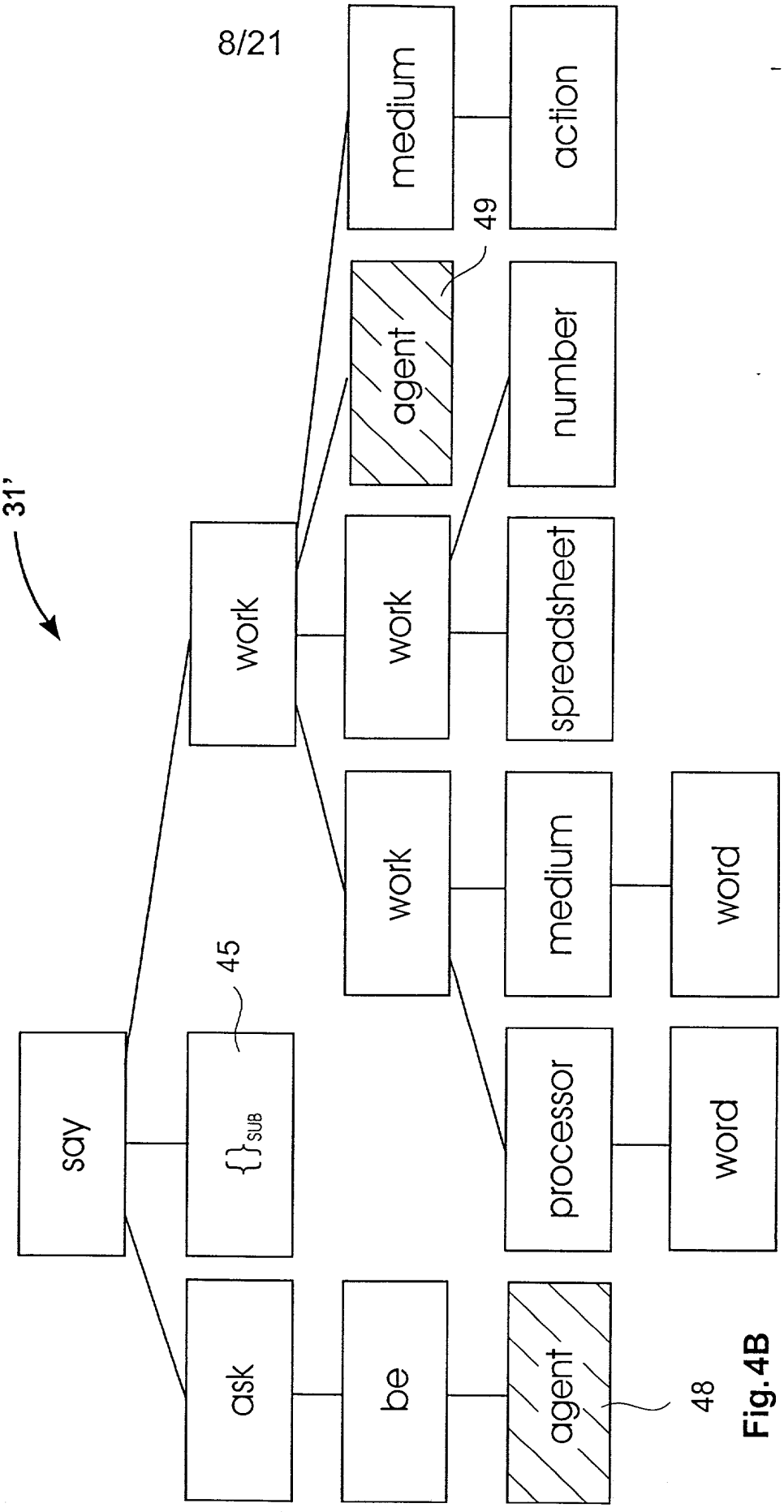

31'
say
{}SUB
45
ask
be
agent
48
work
work
work
agent
49
medium
action
number
spreadsheet
medium
word
processor
word

Fig. 4B

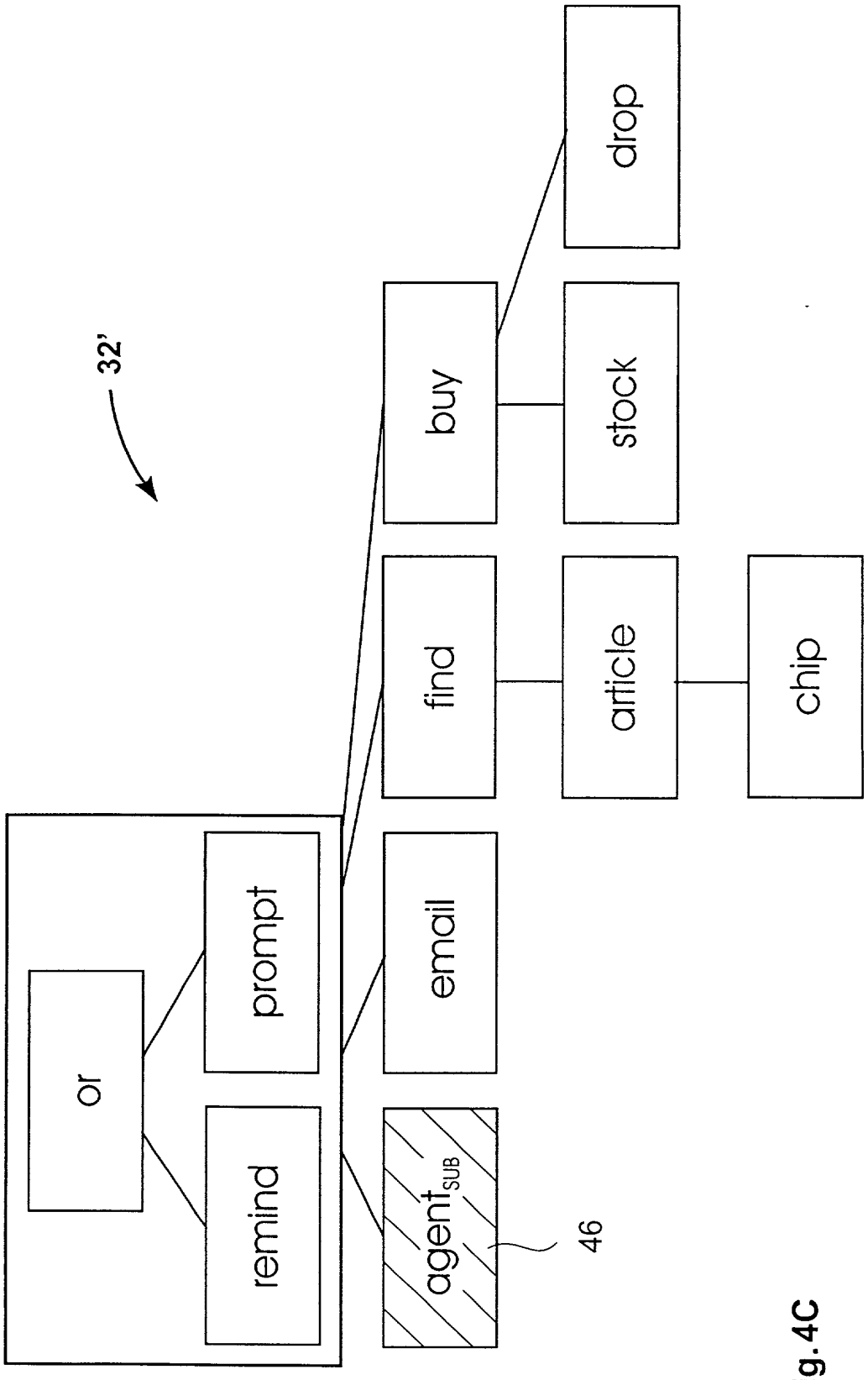

32'
or
prompt
remind
email
agent SUB
46
find
article
chip
buy
stock
drop

Fig. 4C

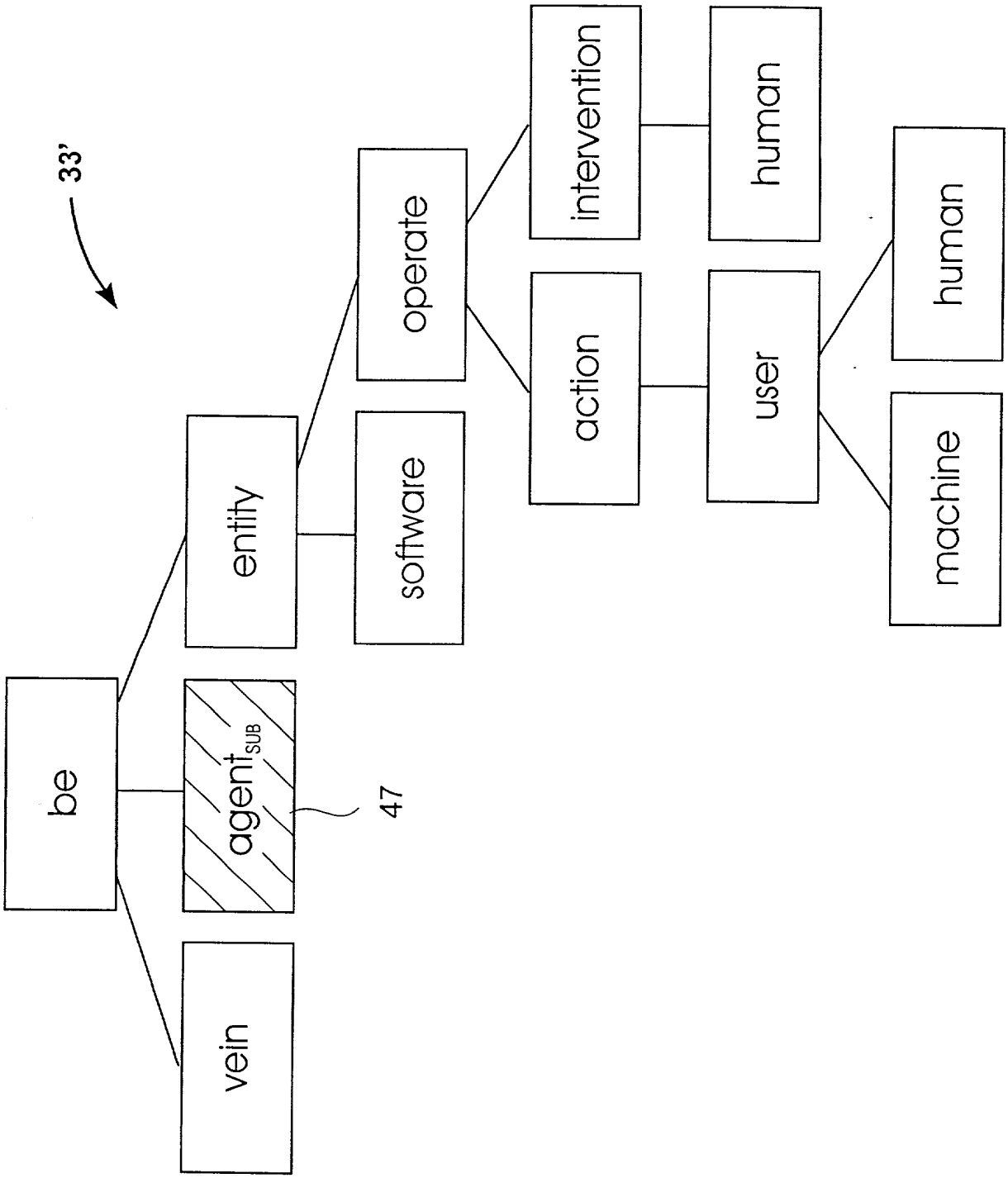
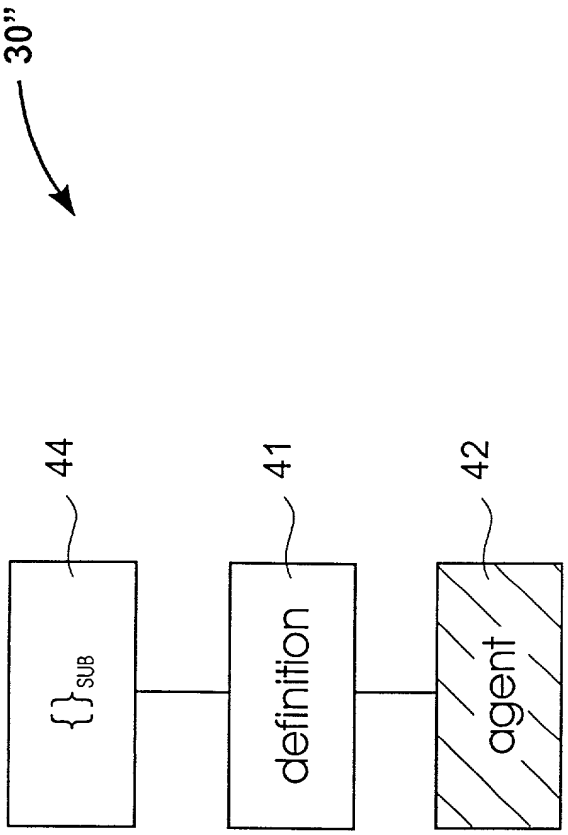
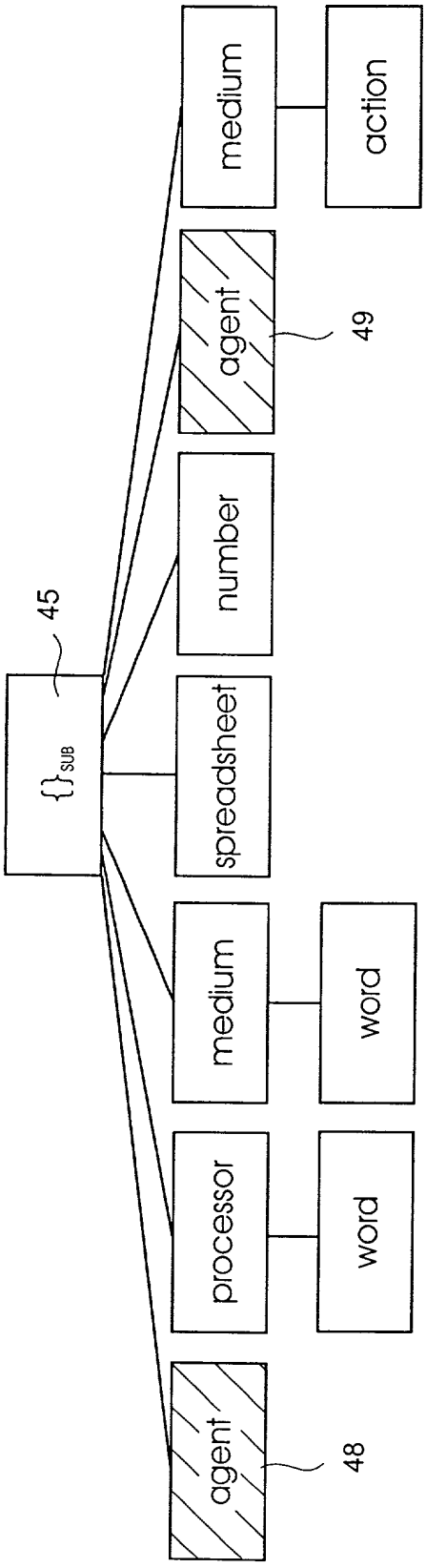

33'
be
vein
agent SUB
47
entity
software
operate
intervention
action
human
user
human
machine

Fig. 4D



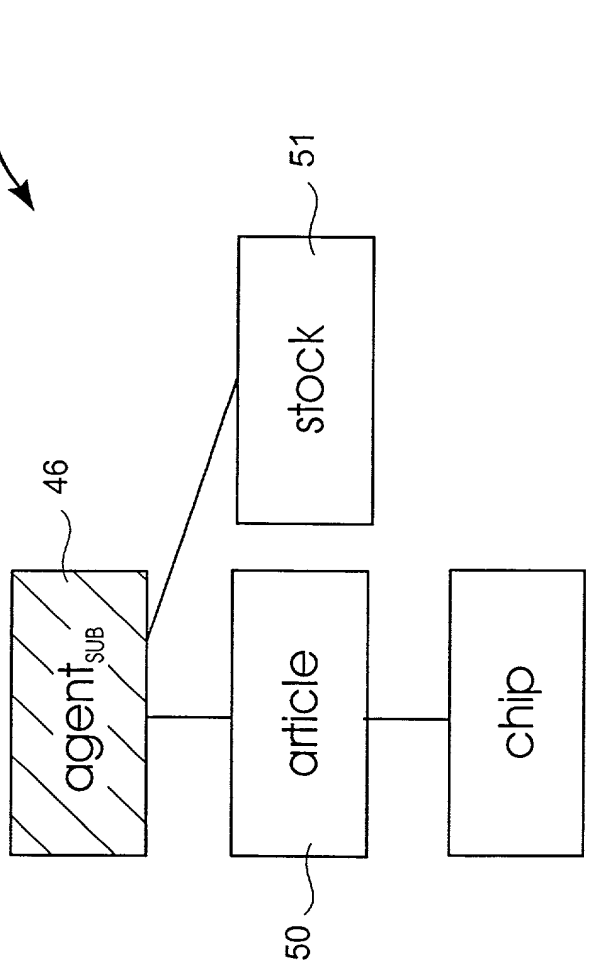
First neighbors: 1
First and second neighbors: 1

Fig. 5A



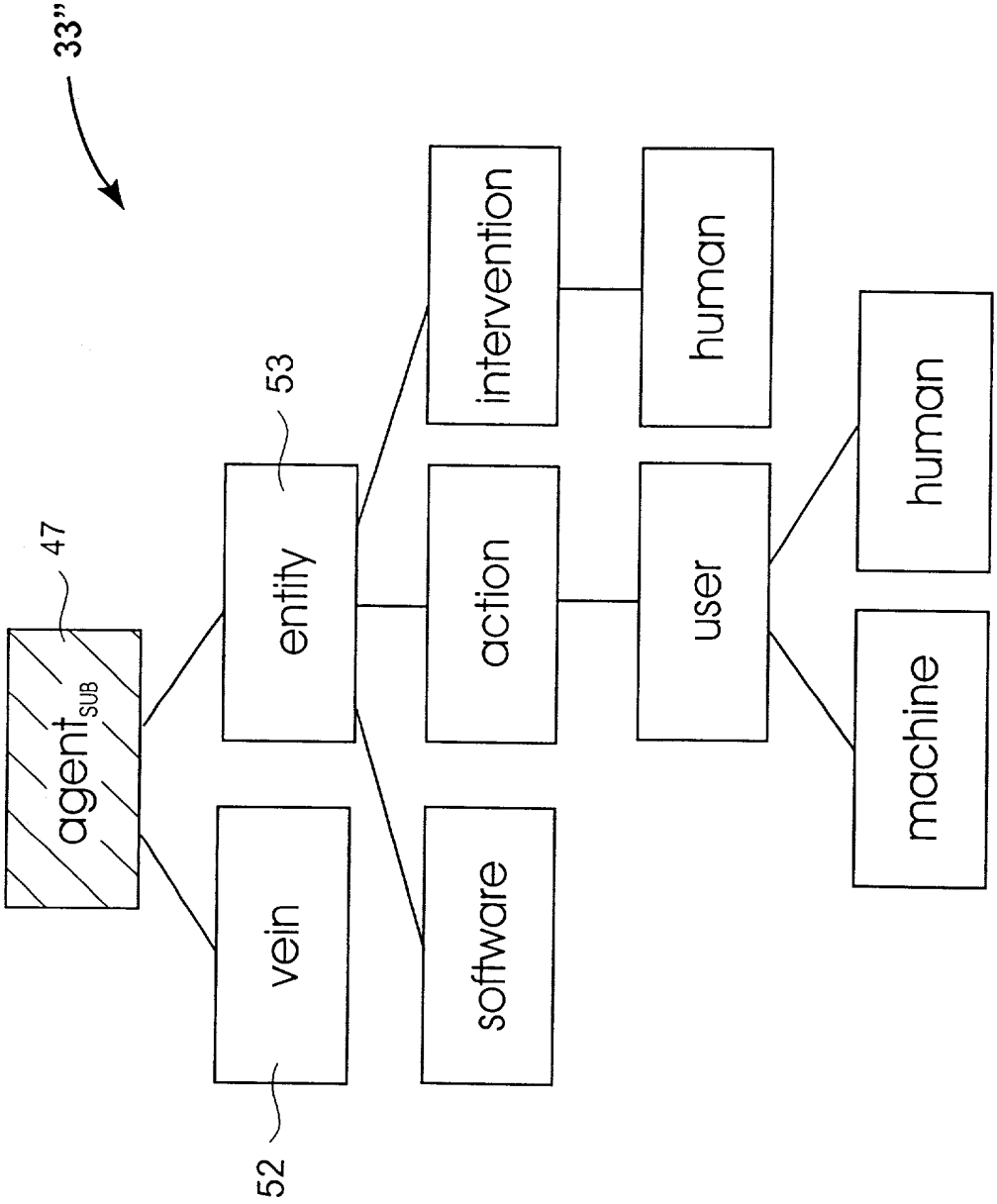
First neighbors: 0
First and second neighbors: 5

Fig. 5B



First neighbors: 2
First and second neighbors: 3

Fig.5C



First neighbors: 2
First and second neighbors: 5

Fig. 5D

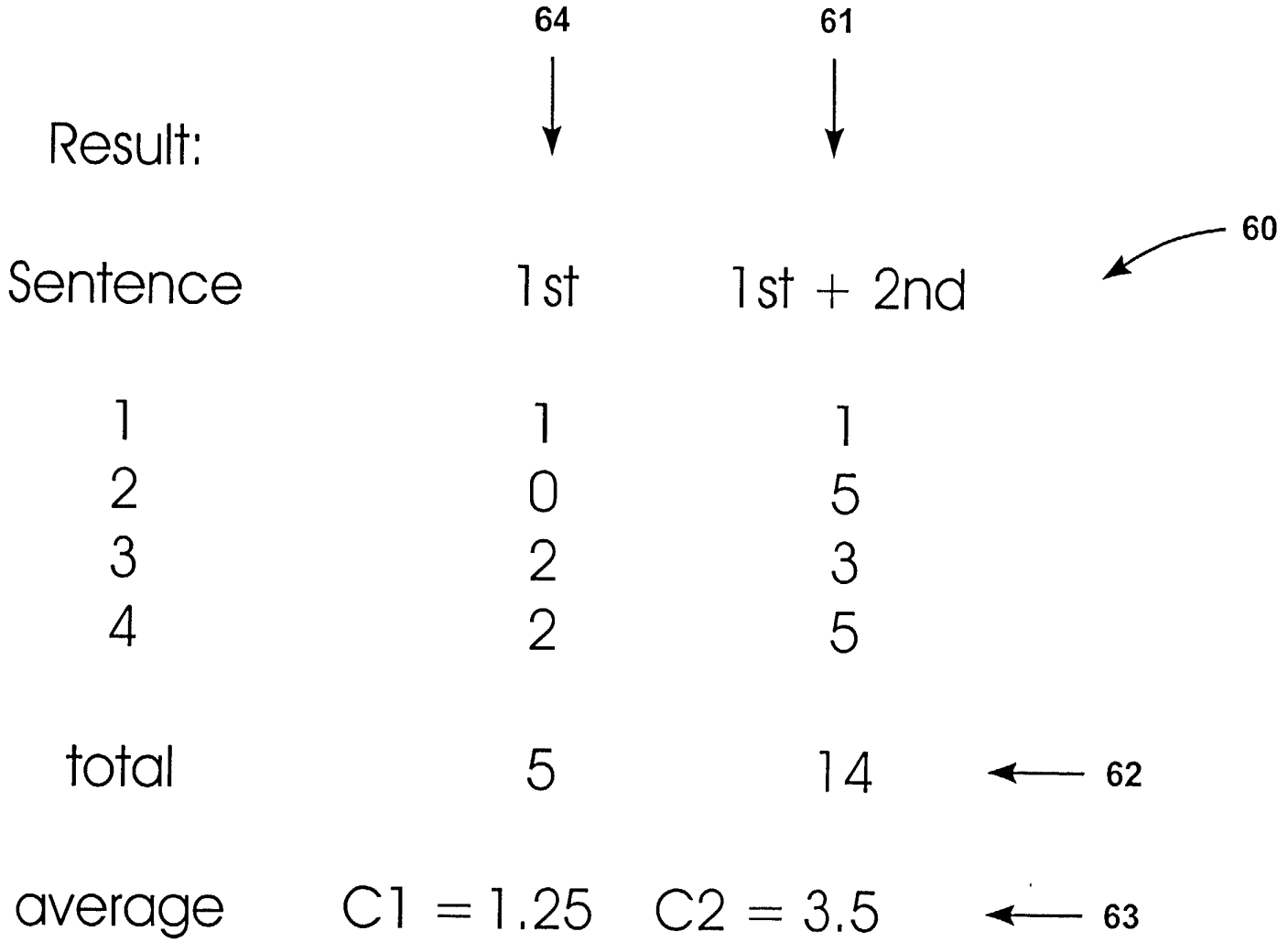

64
61
Result:
60
Sentence
1st
1st + 2nd
1
1
1
2
0
5
3
2
3
4
2
5
total
5
14
62
average
C1 = 1.25
C2 = 3.5
63

Fig. 6

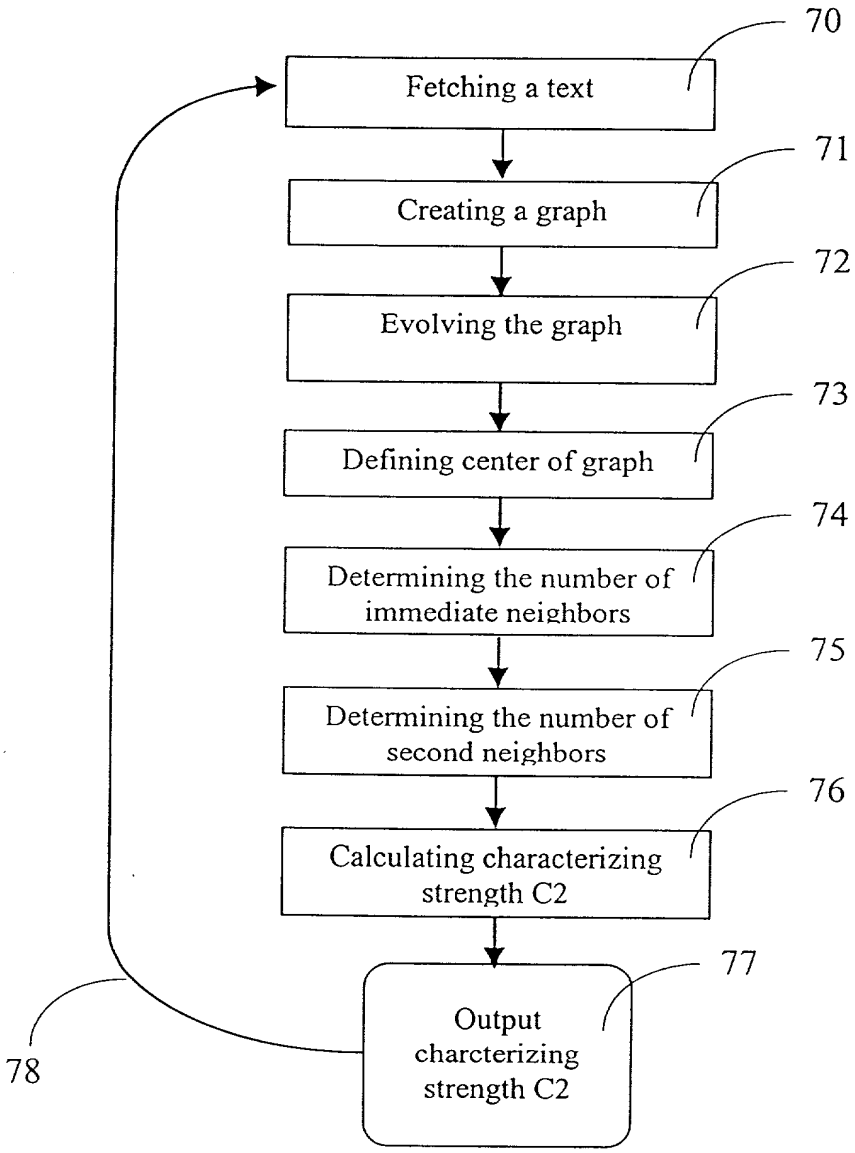

70
Fetching a text
71
Creating a graph
72
Evolving the graph
73
Defining center of graph
74
Determining the number of immediate neighbors
75
Determining the number of second neighbors
76
Calculating characterizing strength C2
77
Output charcterizing strength C2
78

FIG. 7

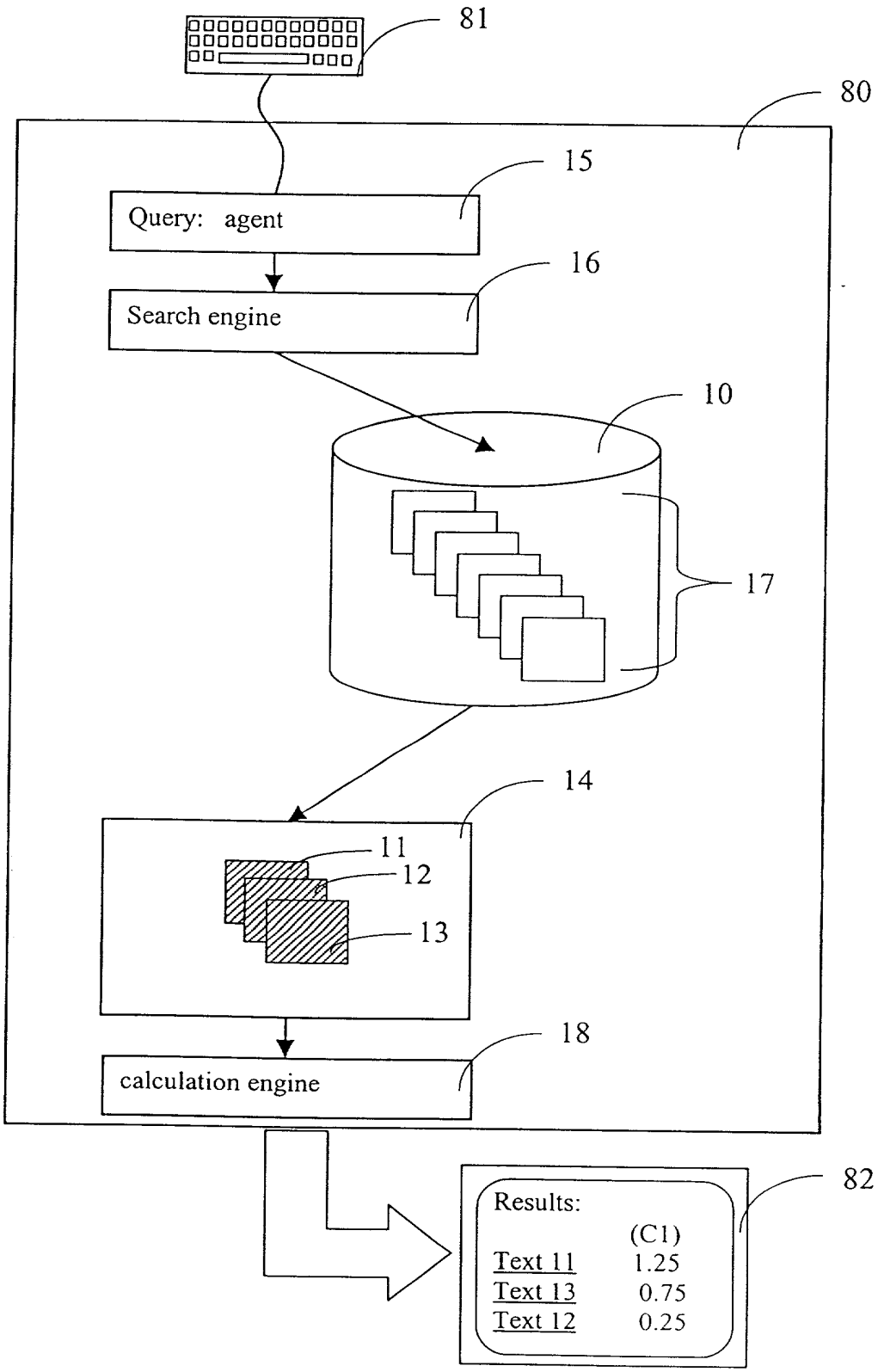

81
80
15
Query: agent
16
Search engine
10
17
14
11
12
13
18
calculation engine
82
Results:
(C1)
Text 11 1.25
Text 13 0.75
Text 12 0.25

FIG. 8

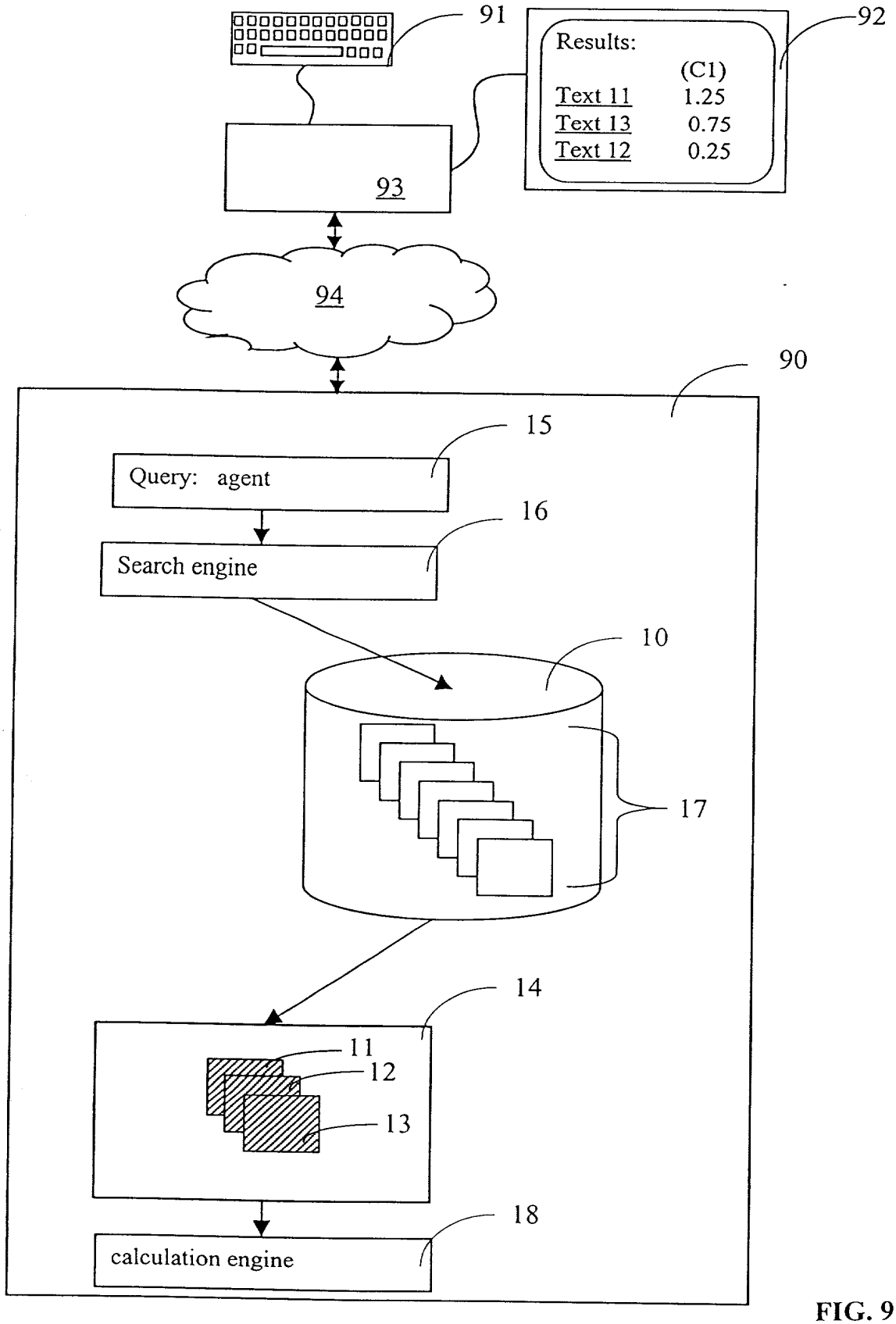

91
92
Results:
(C1)
Text 11 1.25
Text 13 0.75
Text 12 0.25
93
94
90
15
Query: agent
16
Search engine
10
17
14
11
12
13
18
calculation engine

FIG. 9

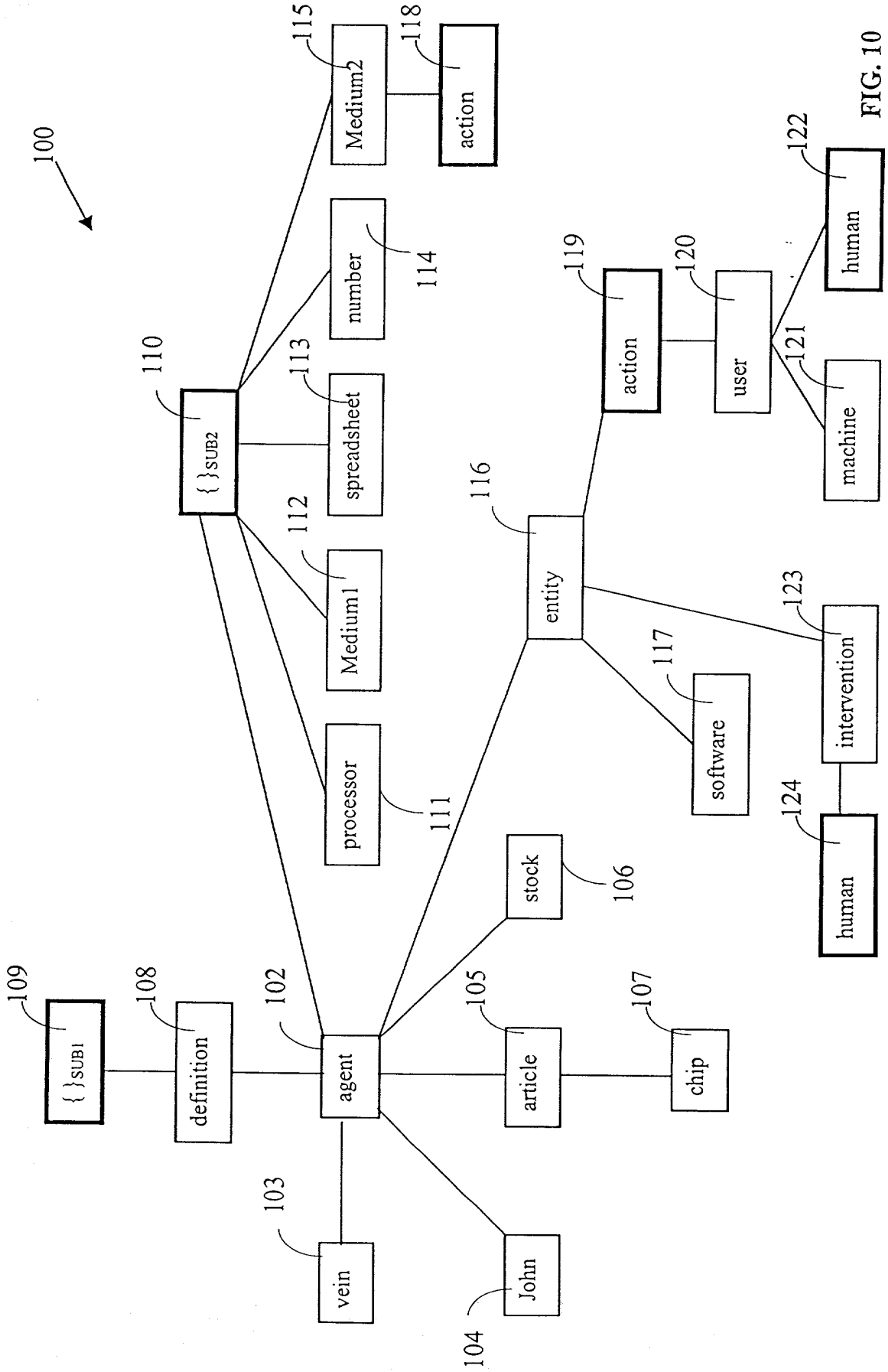

100
{ }SUB1
109
definition
108
agent
102
vein
103
John
104
article
105
chip
107
stock
106
{ }SUB2
110
processor
111
Medium1
112
spreadsheet
113
number
114
Medium2
115
action
118
entity
116
action
119
user
120
machine
121
human
122
software
117
intervention
123
human
124

FIG. 10

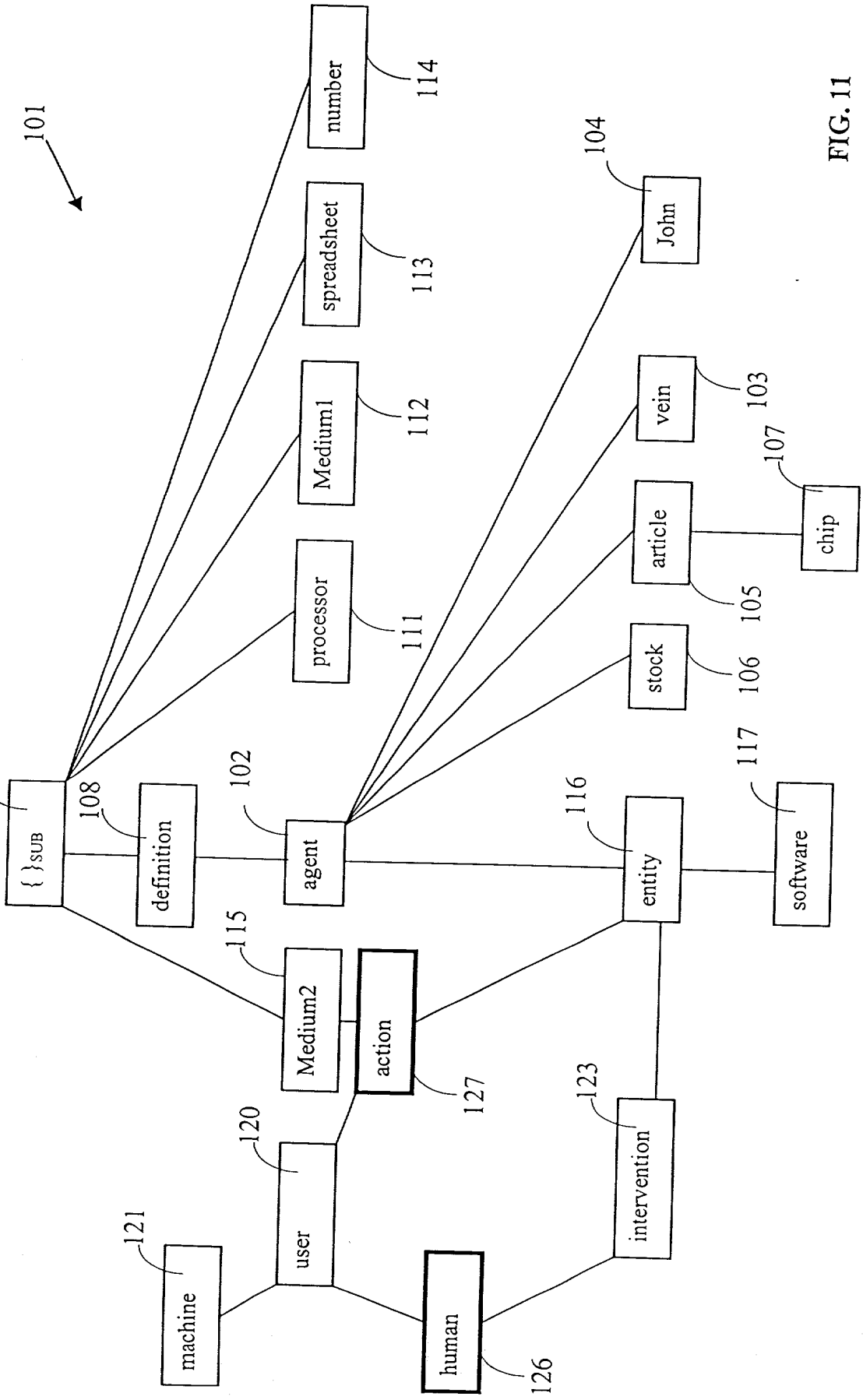

101
number
114
spreadsheet
113
Medium1
112
processor
111
{ }SUB
125
108
definition
102
agent
104
John
vein
103
107
chip
article
105
stock
106
116
entity
117
software
115
Medium2
action
127
120
user
123
intervention
121
machine
human
126

FIG. 11

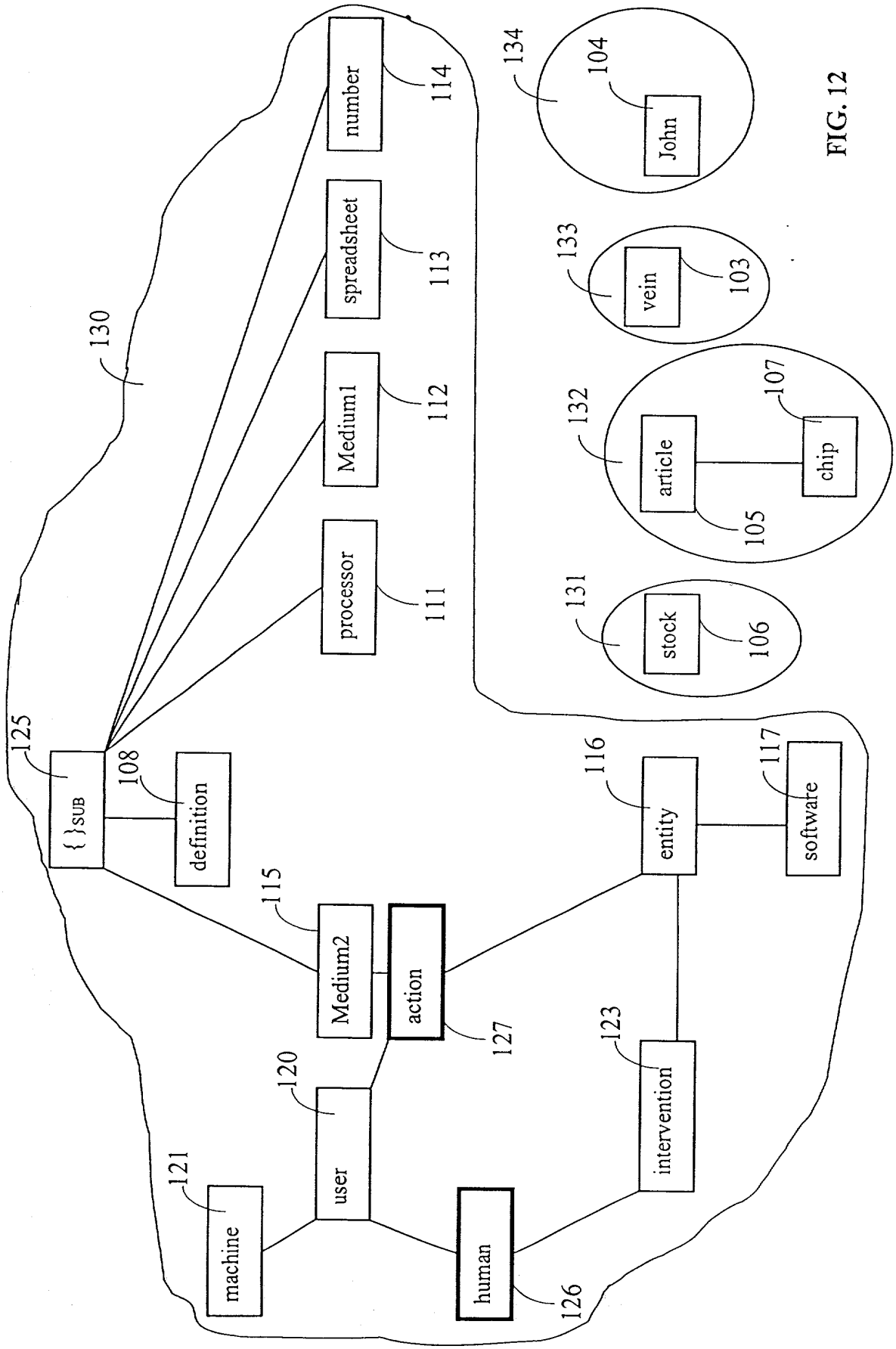

130
number
114
spreadsheet
113
Medium1
112
processor
111
134
104
John
133
vein
103
132
article
107
chip
105
131
stock
106
125
{ }SUB
108
definition
115
Medium2
action
127
116
entity
117
software
120
user
123
intervention
121
machine
human
126

FIG. 12